a switch disposed between the conductive portion and the bias section, and configured to switch between a state where the conductive portion is grounded and a state where the conductive portion is connected to the bias section.

REMARKS

Favorable reconsideration of this application as presently amended is respectfully requested.

Claims 21-48 are presently active, Claims 21 and 35 having been amended, and Claims 40-48 having been added by the present amendment.

In the outstanding Office Action, Claims 21-25, 28-29, and 35-39 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Frankel (U.S. Pat. No. 6,106,630). Claims 26-27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Frankel in view of Shinohara (U.S. Pat. No. 5,612,144). Claims 30-31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Frankel in view of Shinohara. Claims 32-34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Frankel in view of Shinji (Jap. Pat. No. 05198498).

Independent Claim 21 defines a conduction structure configured to conduct static electricity generated on a worktable of a processing chamber to a grounded portion outside the process chamber. The conduction structure includes a conductive film formed on the worktable, formed on the pedestal, and electrically isolated from a casing of the process chamber. As defined in amended Claim 21, the conductive film is integrally formed and is made of a same material as on the worktable and the pedestal. Independent Claim 35 defines a conduction structure arranged such that a conductive film is formed on the worktable and the pedestal and arranged such that the conductive film and a conductive portion of the casing

are electrically connected to ground. Like amended Claim 21, amended Claim 35 defines that the conductive film is integrally formed and is made of a same material as on the worktable and the pedestal.

Applicants submit that, with this arrangement, static electricity can be effectively released to the ground through the conductive film, without electricity being conducted in a base material of the worktable and pedestal. Accordingly, design flexibility increases because the base material of the worktable and pedestal is not restricted.

Frankel discloses a pedestal 12 and a shaft 100 in which, as shown in Figure 8A, the pedestal 12 is covered with a protective layer 500 for protection. Frankel also discloses that the protective layer 500 covers at least the wafer support surface 12a, and may be applied to an annular upper flange surface 12c, a side peripheral surface 12d, or a bottom surface 12e.[1] Accordingly, in Frankel, the protective layer 500 covers the upper, side, and lower surfaces of the pedestal, but is not disclosed as covering the shaft 100. Indeed, one of ordinary skill in the act would not assume from the disclosure in Frankel that the protective layer covers the shaft because the shaft 100 in Frankel is not exposed to the process chamber (see Figures 1A and 1B of Frankel). Accordingly, there exists no suggestion or motivation in Frankel for forming a protective layer on the shaft, and thus no suggestion or motivation in Frankel for forming a conductive layer on the shaft.

Furthermore, the materials of the pedestal 12 and the shaft 100 in Frankel are formed from aluminum or an aluminum alloy.[2] While the material of the shaft 100 is not clearly described, it must be the same or similar to the material of the pedestal 12, since the shaft is

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[1]Frankel, col. 8, lines 44-48.

[2]Id., col. 8, lines 41-44.

welded to the pedestal 12.[3] Frankel forms the protective layer 500 only for protection of the worktable 12 and, with no protective layer on the shaft, forms a conductive route for releasing electric charge from the worktable 12 that passes through the body of the shaft 100. Releasing electric charges through the body of the shaft brings about a structural limitation such that members 12 and 100 in Frankel constituting the support structure have to be conductive.

In contrast, according to amended Claims 21 and 34, a conductive film is formed on the surfaces of the worktable and the pedestal, thereby forming a conductive route for releasing static electricity on the surfaces of the worktable and pedestal without reliance on conduction through a base material of the pedestal. As a result, the claimed conductive film permits base materials of the worktable and the pedestal to not be restricted by a conductivity limitation.

M.P.E.P. §2143 requires for *prima facie* obviousness that both the teaching or suggestion to make the claimed combination and the reasonable expectation of success be found in the prior art and not in Applicants' disclosure. With no disclosure in Frankel for a conductive structure including a conductive film integrally formed on a pedestal and formed on a worktable and made of a same material as on the worktable and the pedestal, and with no suggestion or motivation in Frankel to apply a conductive coating to the disclosed shaft which is not exposed to the plasma process, the requirements for *prima facie* obviousness set forth in M.P.E.P. §2143 have not been met. Only impermissible hindsight gleamed from Applicants' disclosure would suggest or motivate one to apply a conductive coating of the

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[3]Frankel, col. 10, lines 10-14.

same material to a worktable and a pedestal of a single-substrate processing apparatus, as defined in independent Claims 21 and 35.

New independent Claim 45 similarly defines a conductive film integrally formed and made of a same material as on the worktable and the pedestal and covering the worktable and the pedestal.[4] Thus, for reasons similar to why independent Claims 21 and 35 defined over the applied prior art, it is respectfully submitted that Claim 45 patentably defines over the applied prior art.

Thus, it is respectfully submitted that independent Claims 21, 35, and 45 and the claims dependent therefrom patentably define over the applied prior art.

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[4]Support for the subject matter of the bias section defined in new Claims 40, 42, 44, and 45 and the switch defined in new Claim 48 is found in Applicants' Figure 4 and the supporting specification.

Consequently, in view of the present amendment and in light of the above discussions, the outstanding grounds of rejection are believed to have been overcome. The application as amended herewith is believed to be in a condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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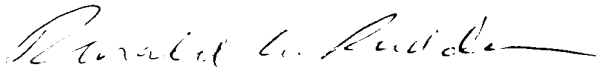

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Marked-Up Copy
Serial No: 09/855,493
Amendment Filed: 4-17-03

IN THE CLAIMS

Please amend the claims as shown below:

21. (Amended) A single-substrate-processing apparatus for performing a semiconductor process, comprising:

an airtight process chamber including a casing and configured to process a target substrate;

a worktable configured to support the target substrate within the casing of the process chamber,

a pedestal standing upright in the casing of the process chamber and connected to the worktable to support the worktable; and

a conduction structure configured to conduct static electricity generated on the worktable to a grounded portion outside the casing of the process chamber, the conduction structure having a conduction route for the static electricity including a conductive film formed on the worktable, formed on the pedestal, and electrically isolated from the casing of the process chamber,

wherein the conductive film is integrally formed and made of a same material as on the worktable and the pedestal.

35. (Amended) A single-substrate-processing apparatus for performing a semiconductor process, comprising:

an airtight process chamber including a casing and configured to process a target substrate;

a worktable configured to support the target substrate within the casing of the process chamber,

a pedestal connected to the worktable to support the worktable; and

a conduction structure configured to conduct static electricity generated on the worktable to a grounded portion outside the casing of the process chamber, the conduction structure having a conduction route for the static electricity including a conductive film formed on the worktable and the pedestal, the conduction structure being arranged such that the conductive film and a conductive portion of the casing are electrically connected to ground,

wherein the conductive film is integrally formed and made of a same material as on the worktable and the pedestal.

Claims 40-48 (New).